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IS ASIATIC CHOLERA CONTAGIOUS?

[Read before the Providence Medical Association by H. W. KING, M.D., Surgeon-General of Rhode Island, and communicated for the Boston Medical and Surgical Journal.]

THIS question is now of public interest, in view of the anticipated coming of the disease. Doctors disagree upon it. This is no new phase in the history of medicine. Doctors have disagreed as to the contagiousness of nearly all diseases which are most strongly influenced by epidemic conditions. It is so difficult to determine which is the prime source of disorder, when both contagious and epidemic causes are operating! Hospital gangrene, puerperal fever, yellow fever, scarlet fever, typhus fever, hooping cough, and plague were for a long time held in doubt, and finally, after hot dispute, quietly found place, one by one, in the list of contagious diseases.

Cholera is most prominent among those of which we are still in doubt, and about which we may dispute. I purpose briefly to examine a few of the reasons recently given to the public why some "physicians cannot believe cholera to be contagious," and to extend a few remarks upon the subject of contagion.

First. On board the steamship Atlanta, which brought the disease to New York last November, it was confined to the steerage during the whole passage. The fact that the disease did not spread to other parts of the ship is relied upon as evidence of its non-contagious character.—It would seem to me, better evidence of its non-epidemic character. This fact, which is thought too singular for a freak of contagion, has had its parallel many times in the passage of typhus fever to our shores, and no doubts are now entertained as to the contagion of typhus.

Second. The Emperor of the French, holding the destiny of the nation, "was permitted," recently, to visit the cholera hospitals of Paris, and did not take the disease. This act of the emperor is considered proof that both he and his medical advisers believed the disease to be non-contagious; that the possibility of his taking it was not even doubtful.—Does it prove so much? The French once had another emperor, who, with responsibilities as great upon him as ever rest-

ed upon his nephew, was permitted to cross a bridge at Lodi, swept by thirty Austrian cannon. Does this prove that he and his military advisers were satisfied that there was no danger in the passage? that the possibility of his being hit was not even doubtful?

Third. In India, where the disease has become naturalized, and has prevailed for a long time, the belief is universal that it is not contagious.—The same argument would prove the plague to be non-contagious, while we all hold the contrary. That too is a habitat of the East, and like views are entertained of it there.

Fourth. Cholera can be arrested in its progress by proper medication, and the question is asked, "Is this true of smallpox, or any other confessedly contagious disease?"—It may not be true of smallpox, but it is true of many other confessedly contagious diseases, among them itch, syphilis and porrigo.

Fifth. In cholera there is no definite period of incubation, nor any regular stages of development in its progress and decline, while it is asserted in all known contagious diseases these stages are generally clearly marked.—Is this statement true? Let us examine and compare it with the teachings of one of the best of American authors. Dr. Wood says of pertussis, "The period of incubation is from two to thirty days;" of measles, "from one week or less to three weeks or more;" of scarlet fever, "two or three days to two or three weeks;" and of typhus fever, "from immediately to several months." Each of these, in its progress and decline, is as irregular as in its development, and these are all well known contagious diseases. The period of incubation of the latter would seem indefinite enough to correspond with cholera or almost any other disease.

Sixth. "One attack of cholera furnishes no security against a second."—Neither does one attack of gonorrhœa, syphilis, porrigo, frambœsia or itch furnish security against a second attack, and these are all contagious diseases.

Seventh. "Cholera remains quiet for a long series of years, almost constantly existing at the place of its origin, and does not extend beyond that region. Could this be true of any strictly contagious disease?"—It is true of the plague, and also true of typhus and yellow fever.

Eighth. It is stated that it is an established law of cholera that the prevalence of the disease is in inverse ratio to the height above the level of the sea, or large rivers, or bodies of water in the vicinity, and the question is asked, "Was it ever known or suspected that any such law of elevation existed in relation to any strictly contagious disease?"—I answer, it is known that the same law exists in relation to the prevalence of nearly all disease, both contagious and non-contagious. The exceptions are those diseases peculiar to mountainous regions. This idea, now advanced by Dr. Snow, was used by Dr. Rush in his argument against the contagiousness of yellow fever. It is answered by stating the fact, that the law of elevation in rela-

tion to the prevalence of disease follows the law of settlements. The population of the world is so distributed.

Ninth. "Cholera is uniformly checked in its progress by cold, and prevails most severely in hot weather. Smallpox, on the contrary, and other contagious diseases, which do not depend upon actual contact, prevail most severely in cold weather."

How is it with yellow fever? It is uniformly checked by cold; indeed, it requires a higher temperature for its existence than cholera. The question of the contagion of this disease has been more fully discussed than that of cholera, and the professional mind is generally settled in the belief that it is contagious. This brings me to a point where theory might be introduced into the argument. Do not all contagious diseases dependent upon corpuscular origin prevail most severely in cold weather? And do not all diseases dependent upon cryptogamous agency for their cause prevail most severely in warm weather? The prevalence of cholera in Russia during the winter might tend to prove one part of this hypothesis. The life of the sporule may have been protected in the underground huts, at a temperature where germination could go on, while in the clear, cold air above no epidemic cause may have existed.

The most of the arguments advanced to prove the non-contagion of cholera may be summed up in this simple statement: Cholera is not contagious because it does not follow the same law that smallpox does; reasoning as though smallpox were the type of contagious disease, and judging all other diseases by it. As well might itch be taken for the type, and other diseases judged by that. From what has been shown it would appear that cholera is not more anomalous than many other diseases known to be contagious, yet it is not contended that there is any general law governing contagious disease, for there is none. Each is peculiar to itself. There may be a resemblance in form, or kind of substance producing disease, that may be classified. We have contagious diseases that are known to be of animalcular origin, as scabies, dracunculus, pulex penetrans, &c. We have others that we know to be of fungous origin, as favus, sycosis, porrigo, &c.; and others that we believe to be of corpuscular origin, as syphilis, hospital gangrene, smallpox, &c. In thus classifying we have a resemblance in the kind of *materies morbi* forming each class, and here the resemblance ends. As the disease produced by the acarus scabiei differs from that produced by the filaria medinensis, and as the disease produced by variolous matter differs from that produced by syphilitic matter, so may we expect cholera to differ from other diseases, though produced by the same class of contagious matter.

In many of the arguments upon this question of contagion there seems to be wanting a clear idea of the definition of the subject. The best definition that I have seen, and the one that seems to me to convey a near idea of what is generally understood by the word con-

tagion, is that given by Dr. Wood in his Practice of Medicine. In this, contagion is held to be nearly synonymous with infection, but contagion is allowed a broader signification, and to embrace the meaning of both terms, including contactual and remote propagation. An agreement in the understanding of terms, though we still might differ, would save many words in dispute. With the microscope we may hope some day to solve the mystery that now divides us. It seems no deeper hidden than was the poison of malaria before Dr. Salisbury discovered that, instead of its depending upon the decomposition of vegetable matter for its origin, it has its source in cryptogamic life. He or some one else may show that, instead of cholera's depending upon the "decomposition of filth," vegetable organism must exist in choleraic air, and that germ and human excrement are necessary for its growth.

INTERESTING CASE OF CEREBRAL DISEASE—TUMOR OF THE LEFT OPTIC THALAMUS.

[A FRIEND has kindly permitted us to print the following private letter, which will be read with much interest.—EDS.]

MY DEAR DR.,—The case of Mr. W. A. G.'s adopted daughter has proved fatal. The history is, in short, as follows:—She first showed some mental disturbance in June last; in July and August she was dull at times, at others excitable and wilful; at the same time she could not write well; then vision was disturbed. This was followed by a general affection of the right side of the body, arm, leg and tongue; the latter being thrust out obliquely. For the past two months the nausea, which has existed from early in the disease, has been very severe, especially in the morning. Pain in the forehead, severe at times, and occasionally giddiness, followed by loss of consciousness for about five minutes, never attended by convulsions. During one of these attacks, rather longer than usual, she died, November 27th.

The examination of the brain was made by my brother, Prof. Jeffries Wyman, yesterday, and the results were very interesting; they are, in short, as follows:—Nothing peculiar was observed until the ventricles were opened, when a larger quantity of fluid than usual escaped, of a natural color. On laying the ventricles fully open, it was seen at once that they were not symmetrical; the left was much larger than the right. The floor was rounded out, and the distinction between the optic thalamus and the corpus striatum of the left side was almost completely effaced. The plexus choroides of the left side ran obliquely across the floor of the ventricle over the rounded mass, and was quite different from that of the right; it formed, instead of the symmetrical V-shape, another ⋀, with one arm much longer and more oblique than the other. The fornix was pushed far

to the right of the median line; measured across the floor of the ventricle the left was 1½ inches, and the other ¼ inch. In cutting through the mass, the corpus striatum (left) was pushed quite out from its natural position, and the disease seemed to be in the optic thalamus only, which measured 2½ inches in depth and 1½ inches in width, and was made up of a lardaceous-looking mass, which cut with much more firmness than the natural substance. The whole mass was as large as an ordinary sized hen's egg, and was somewhat of that shape.

I omitted to state that the layer of epithelium lining the left ventricle was thickened, and of a velvety, almost flocculent look, especially at its anterior part.

I send you this account of the case, which is quite interesting to me, and I doubt not will prove so to you. It is singular what a monstrous difference there is between the effects of a small deposit of apoplectic blood and this large mass of diseased matter coming on gradually. Truly yours, MORRILL WYMAN.

Cambridge, Mass.

CLINICAL REMARKS ON A CASE OF EXTRACTION OF CATARACT.

[Continued from page 238.]

JANUARY 5th.—Before proceeding to operate on the case of cataract recently referred to, I have the following remarks to make.

All so-called *preparatory treatment* is not only superfluous but mischievous, unless, indeed, there are special circumstances in the individual case requiring attention. The healing process, after extraction, goes on most favorably when the person operated on is in a high state of health, and is, so to speak, morally and physically well balanced. Even an active cathartic is to be shunned, the excitability of the patient being thereby increased. It is sufficient to induce a gentle evacuation by the use of castor oil, or some other mild laxative, the day before the operation. If we have a chance of previously watching the patient, it would be well to test the effect of a dose of morphine at least two days before the operation, in order to ascertain how the individual is affected by a drug we are so likely to subsequently employ, and which acts so differently in different cases.

A very important factor is the frame of mind of the patient, which may be such as to require encouragement. With many it is best to make no previous allusion to the operation. The course to be pursued must be left to the tact of the surgeon, who must lose no time in taking into account the imaginative tendencies of the patient. Experience shows that the patients who are free from care and full of hope do much better than those of excitable temperament and oppressed with anxious forebodings. During the operation, too, a word from the operator is, under many circumstances, of as much consequence as his manipulations. Avoid scolding or threatening, even

when patients misbehave themselves, for such a course seldom fails to depress their spirits and paralyze their self-control. Jocular allusions, calculated to abstract their attention from the critical moment they are passing through, often have a good effect. It is a well-known rule not to let the patients wait long for the operation, but to perform it as soon as possible after it has once been decided on. Bad weather or indifferent light should not be allowed to weigh as much with us as depression of spirits on the part of the patient.

Is *atropine* to be instilled before the operation? Objections have been raised to this, particularly by English surgeons. It has been argued that the iris, being drawn back by the mydriatic, becomes thicker, and hence more liable to be injured by the cataract knife. It has been even argued that no real object is attained, inasmuch as the pupil contracts again after the evacuation of the aqueous humor; and, finally, a fear has been expressed that the peripheric retraction of the iris may diminish the protection afforded the vitreous humor, and thus favor its escape. None of these objections appear to me well grounded. Even were the iris to increase in thickness as the pupil widened, it would be a matter of entire indifference; for if we take a case where extraction has been properly performed and examine the inner wound, it will be found that its arc nearly coincides with the edge of the enlarged pupil, or that its diameter barely exceeds that of the latter. It will therefore be found, in cases where mydriasis is complete, that the iris is either outside of the inner cut, or else that only a narrow border of pupil falls within it, and that this cannot possibly be so thick as to come in contact with the point of the knife, which is either close to the inner face of the cornea, or has attained to a corresponding point on the other side. It is true that the pupil contracts again after the escape of the aqueous. Leaving, however, out of sight the fact that the contraction itself is less than if no atropine has been employed, we should remember that our object is not so much to enlarge a firmly closed pupil—the influence of which in preventing a facile exit of the lens was formerly unduly feared—as to render more easy the completion of the section, during which, of course, the mydriasis persists. Finally, the objection that the use of atropine increases the chances of a loss of the vitreous is neither theoretically plausible nor confirmed by experience. I am accordingly disposed not only to dismiss the objections against, but to positively approve the use of atropine the evening before the operation. It is unquestionable that the completion of the section is thereby facilitated, especially when the anterior chamber is narrow, for the iris is thus entirely or nearly withdrawn from the region of the inner cut. It moreover strikes me as of importance that after the re-secretion of the aqueous humor the mydriasis in part returns, a fact that may be demonstrated by instilling atropine into the eye of an animal, then doing paracentesis and awaiting the refilling of the anterior chamber. This secondary mydriasis has

some influence in averting a tendency to inflammation on the part of the iris. Finally, the paralysis of the ciliary muscle, persisting as it does after paracentesis, must be productive of good.

The operation itself has already been alluded to. We have yet to decide on the *direction of the section.* This paves the way for the general discussion as to whether extraction up or down offers the more advantages. Having once adopted the compressive bandage, the use of which brings with it the principal advantages of the upper section, I became more and more a partizan of extraction downwards, after having for six years practised exclusively the other method. My experience shows that an operation upwards and one downwards, each done according to rule, offer practically equal chances of success. Although, on the one hand, the average length of after-treatment of extraction upwards is three days less (twenty-one to twenty-four days' stay in the hospital), the percentage of prolapse of the iris, of iritis and of suppuration is the same; while, on the other hand, it must be conceded that partial suppuration does less damage in a case of lower than of upper section, the tendency to gravitate downwards being productive of evil results. It must further be alleged in support of the lower section that its employment renders it possible to do a greater number of operations strictly according to rule, the surgeon being less dependent on the docility of the patient, and even on that of the assistant. It is here in his power to prevent the flap from coming into rude contact with, or being everted by the lid, and to get rid of cortical substance without the introduction of instruments, &c., even when the patient has but little control over the movements of his eye. It is true that, with sufficient practice, the upper section gives very good results, even in cases where the eyes are deep seated, the patients unruly, &c.; still, the greater length of the operation and the danger of reversing the flap against the upper lid are disadvantages which, however skilfully they may be met, increase the amount of manipulation, interfere with the mechanical execution of the operation, and in a doubtful case may incline the scale in the wrong direction.

As is usually the case when the merits of different operations are under discussion, we have in the present case a variety of reasons for and against, the most of which experience has shown to be visionary. For instance, it has been alleged that vitreous was, by the law of gravity, more likely to be lost in extracting downwards. The reverse would be more correct. Vitreous escapes when the zonula or hyaloid are ruptured, a thing the less likely to happen in proportion as the exit of the lens and cortical substance is facilitated, which indubitably is true in the case of the lower section. It has been, moreover, asserted that corneal opacities, when they result, are productive of more disturbance in the case of the lower than of the upper section. Corneal opacities that amount to anything, however, only result from an exceptional condition of things, from prolapse of the iris or partial suppuration. The former would be accompanied by a dislocation of the pupil, which, in the general run of cases, had better take place above than below; while, in the latter, the pupil is either closed or contracted, and an iridectomy is indicated at any rate. It is also objected to the lower section that, if the edges of the wound are not in exact apposition, the border of the lower lid may

get in the way; such a malposition, however, seldom occurs, and would not be allowed to remain. Whichever method were employed, a portion of the iris would have to be excised, and perhaps some vitreous evacuated, both of which things are more readily done in the case of the lower than of the upper section. Where the operation downwards has been done according to rule, the flap lies in such exact apposition that the lower lid causes no derangement of the parts, even when the gaze is suddenly directed downwards. Since commencing the systematic employment of the compressive bandage I do not, even where the eyes are unnaturally prominent, hesitate to extract downwards. I do not, however, give myself out as an opponent of extraction upwards. By so doing I should disparage the excellent results which many operators have thus obtained, and even the results of my own previous experience. I have already admitted that the average length of after-treatment is less in extraction upwards, owing to the fact that in a case of lower section, where no bandage has been used, the vicinity of the wound is more apt to be irritated by the action of the lids than when the cut is above and thus protected. I merely wished to draw attention to the fact that the much-vaunted superiority of the upper section is in many respects visionary, and that its real advantage, which consists in the uniform protection and pressure afforded by the upper lid to the wound during its first union, has been fully compensated by the introduction of the compressive bandage, and can no longer be used as an argument against the other method, the execution of which is more rapid, and in which we are less dependent on the patient. And if the results are, as I do not dispute, on the whole equally good, the preference must be given to extraction downwards on account of the greater facility with which it is performed. At all events, I advise the expert as well as the neophyte, in the case of a restless patient, to extract downwards.

In our own case we have, moreover, a special reason for choosing the lower section, viz., the iridectomy we are to interpolate as the second step. With the upper section the excision of a piece of iris, corresponding with the apex of the cut, is a very ticklish thing, unless we are aided by entire tranquillity on the part of the patient. Otherwise the excision must be lateral, and we gain only a partial advantage.

We shall, in accordance with our usual practice, operate on this patient *in bed*. Although this position is not entirely convenient for the operator, the patient enjoys the advantage of the greatest possible amount of muscular relaxation, and has afterwards to make no change. Surgeons who operate on their patients sitting are compelled, when anything out of the way occurs, to get them to bed during the operation, inasmuch as in certain contingencies—such as escape of the vitreous—the horizontal position is indispensable. As we are to deal with the right eye, the operator must sit behind the head of the bed, unless he happens by some freak of nature to be ambidexter, or else during his medical education was influenced by a now exploded ophthalmic hobby and worked up a partial ambidexterity, for worked up it must be. The choice is free to all; still, being sworn foes to all surgical coquetry, we would remind those who plume themselves on ambidexterity that the creation of practical difficulties, when such might with entire propriety be avoided, is less a merit than an indiscretion. It is not likely that any surgeon would acquire a title to dexterity because he amputated one leg with the right hand and the other with the left, instead of so varying his position as to do both

with the right hand. The same holds with regard to ophthalmic operations, provided the principle of operating on the patient in a recumbent position be once adopted.

[To be continued.]

KIRKBRIDE INSANE ASYLUM.

To the Editors of the Boston Medical and Surgical Journal.

MESSRS. EDITORS,—A brief account of a visit to the "Kirkbride Insane Asylum," or Pennsylvania Hospital for the Insane, may perchance not prove uninteresting to some of your readers.

This hospital, one of the best if not the best in the country, is situated about four miles from the heart of the city, in a quiet and delightful suburban retreat. It was, as you know, in Pennsylvania that the first provision for the insane was made in America, and this hospital—the medical care the best, the grounds of the most delightful and picturesque style, and the buildings of the finest and most beautiful in the country—will attest the fact that Pennsylvania's interest for these sad ones has never flagged for an instant. The history of the institution is briefly as follows:—In 1752 there stood an old building in the heart of the now great city, which was used as an asylum for the insane. In 1756 a larger and better building was erected at the corner of 8th and Pine Sts., and given to the use of these unfortunate beings. This was used until 1841, when, on New Year's day, the transfer was made to the building now under consideration. At that time one hundred patients were removed, that being the total number of patients. To-day there are 304, with a provision for 450. During these twenty-five years there have been the following—

	Males.	Females.	Total.
Admissions	2421	2133	4554
Discharges	2268	1982	4250
Remaining	153	151	304

At the time of the transfer (1841) there was but one building, which accommodated the patients of both sexes. This building, together with the surrounding land, was purchased with the money accruing from the sale of lots near the site of the old hospital, which belonged to the institution. Nearly eight years ago it was thought best, by the able and efficient manager and superintendent, Dr. Thomas S. Kirkbride, to separate the sexes, and with indefatigable perseverance, industry and zeal he raised enough money, through the generous subscriptions of the philanthropic men of Philadelphia, to erect a magnificent building, which is now used exclusively for the males. These two buildings—that for the males and that for females—are nearly three quarters of a mile apart, and both are situated upon grounds naturally teeming with beauty, and which have

been adorned and beautified still more by artistic taste and skill. The grounds I can describe but meagerly. There are 111 acres of land, 91 of which are devoted to gardens and pleasure grounds. There are 3 miles of carriage rides, and fully an equal amount of pleasant bricked or planked foot-walks. Besides the two buildings proper, and the necessarily accompanying outbuildings, there are two or three beautiful rustic little cottages, for patients of the wealthier and more refined class. There are workshops in which the industrious males can spend as much of their time as they see fit; there are libraries of an excellent character in each ward to instruct and amuse others; there are museums, in which are collected all sorts of curiosities of nature and art; there are picture galleries, in which even the sane can spend pleasantly many an hour; there are musical instruments of every description, to please and instruct; there are gymnasiums, bowling alleys, billiard tables and bagatelle boards almost without number. In short, there is scarcely anything calculated to amuse and instruct such a sad set of beings that this hospital does not afford.

Of the many musical instruments for the patients' use, I may mention that there are 20 pianos in the hospital, one of which is a curious relic, being the first piano ever used in an asylum for the insane in America. Among the pictures there is one masterly work of art, the great work of Benjamin West, of Christ Healing the Sick. This was given by the artist to the institution, and it has been to it a source of some $30,000 income.

Four of the seven nights in the week are devoted to oral instruction, &c., to the patients. One evening is devoted to the reading of the Bible. Lectures on popular scientific subjects are delivered in a systematic course four times a week. Of no little interest is the magic lantern with its hydro-oxygen apparatus. This is 18 feet in diameter, and its exhibitions with dissolving views are of the most brilliant character.

The beneficent influences of this great asylum are daily more and more apparent. The unfortunate who are placed here testify to its excellent management, and the superintendent is rewarded by the consciousness that his good work is being felt and appreciated.

In my next I propose to give an account of the summer schools now in session at the colleges here. Yours truly,

E. R. Hutchins.

Philadelphia, April 14th, 1866.

We see it stated in the daily papers that spotted fever has broken out in Maplewood Female Seminary at Pittsfield, and that the pupils have been dismissed to their homes in consequence. This is the institution, it will be remembered, which suffered so fearfully from an epidemic of typhoid fever several years since.

Bibliographical Notices.

A Treatise on Gonorrhœa and Syphilis. By Silas Durkee, M.D., Consulting Surgeon of the Boston City Hospital; Fellow of the Massachusetts Medical Society; Member of the Boston Society for Medical Improvement; Honorary Member of the Medical Society of the State of New York; Fellow of the American Academy of Arts and Sciences, &c. Third Edition, Revised and Enlarged. With eight Colored Illustrations. Philadelphia: Lindsay & Blakiston. 1865. Pp. 467.

In the number of this Journal published September 1st, 1864 (Vol. Lxxi., No. 5), we noticed the *second* edition of Dr. Durkee's Treatise. We have now to congratulate the author on the appearance of the *third* edition, issued by the same enterprising publishers—Messrs. Lindsay & Blakiston.

If the rapid exhaustion of the two previous editions be any proof of the popularity of the work with the profession, we certainly have it before us. The sale of the second edition has likewise been far more quickly effected than that of the first.

On the appearance of the first edition, it fell to our lot to review the work, and, to that end, we gave it a most thorough and impartial examination. Higher authority than our own, however, has stamped it with the seal of its heartiest approval; and both in this country and abroad it continues to attract marked attention. Its eminently *practical* character, as we have elsewhere stated, has put it into wide circulation, and has made its author not only most favorably known as a clear writer and reliable practitioner, but also, by consequence, to be constantly consulted by professional men, and often from remote localities.

The testimony of foreign medical journals is so flattering to the author, that we propose, at this time, to adduce such notice in place of any further remarks of our own.

The *London Lancet*, of March 3d, 1866, pays the following handsome tribute to our author's labors:

"Dr. Durkee's production is one of those the perusal of which impresses the reader in favor of the author. The general tone, the thorough honesty everywhere evinced, the philanthropic spirit observable in many passages, and the energetic advocacy of professional rectitude, speak highly of the moral excellence of the writer. Nor is the reader less attracted by the skill with which the book is arranged, the manner in which the facts are cited, the clever way in which the author's experience is brought in, the lucidity of the reasoning, the frequent and extremely fair allusions to the labors of others, and the care with which the therapeutics of venereal complaints are treated * * * * * Dr. Durkee's cases are especially important and very appropriately related in support of his positions. Those cases and the author's remarks upon them stamp him as an excellent practical surgeon (or rather physician, as the phrase goes in the States); and they leave the impression that patients going to America could very safely be recommended to him.

"Dr. Durkee has not the honor of having solved the puzzling problems, which, up to this day, have taxed the ingenuity of syphilogra-

phers; but he makes the most of what is known, and applies it in a masterly manner to the treatment of the disease. In this latter respect he is extremely full, minute and clear.

"We may finally recommend Dr. Durkee's book as eminently practical, well written, full of excellent counsel, and worthy of being consulted by every member of the profession."

It is but rarely, we think, that foreign medical periodicals accord snch unqualified praise to writers in this country.

A late number of the *London Medical Times and Gazette* also speaks of the book in terms of the highest approval, and pronounces it an able work.

The appearance of the volume as now presented to us is very elegant. The paper is most excellent and the typography unexceptionable. In all respects the present edition is a credit to the publishers; and we trust that they, as well as the author, will be rewarded for the pains taken and the good taste manifested in the getting up of the work.

W. W. M.

Boston, March 28th, 1866.

Lectures on the Diseases of Infancy and Childhood. By Charles West, M.D., Fellow of the Royal College of Physicians; Physician to the Hospital for Sick Children. Fourth American from the Fifth Revised and Enlarged English Edition. Philadelphia: Henry C. Lea. 1866.

Of all the English writers on the diseases of children there is no one so entirely satisfactory to us as Dr. West. For years we have held his opinion as judicial, and have regarded him as one of the highest living authorities in the difficult department of medical science in which he is most widely known. His writings are characterized by a sound, practical common sense, at the same time that they bear the marks of the most laborious study and investigation. The fulness of his familiarity with other writers on the same subjects, and the numerous illustrative cases of his own, inspire the reader with confidence in him as a man thoroughly versed in the literature of his subject as well as practically acquainted with all its phases.

That our individual estimate of Dr. West's high position as a writer on infantile diseases is only the echo of popular acclaim, which has long accorded to him the same merit, is shown by the simple fact that the book before us has come to the fourth edition in America, the same in Germany, and that it has been translated into Danish, Dutch, Russian and French. Dr. West alludes to this fact in the preface to his last edition with modest complacency; and he certainly has well earned the honest satisfaction which comes from such evidence that his toil has not been fruitless.

For twenty-six years Dr. West has enjoyed special opportunities of studying the diseases of children—first in the Children's Dispensary, and afterwards at the Children's Hospital in London. His recorded experience derived from these sources he sums up in the statement that "the present edition embodies the results of 1,200 recorded cases, and of nearly 400 *post-mortem* examinations, collected from between 30,000 and 40,000 children, who, during the past twenty-six years, have come under my care, either in public or private practice."

The work we are noticing does not pretend to be a comprehensive treatise on all the diseases of children, but is specially devoted to those diseases which, from their great gravity or the inefficient manner in which they are treated in similar works, call for greater fulness and preciseness. Thus we have nearly two hundred pages given to diseases of the brain and nervous system. About as many more are taken up by the diseases of the respiratory system, under which Dr. West discusses the peculiar difficulties of diagnosis in infantile phthisis, growing out of the lesser reliability of many of the auscultatory signs in children, or the obscure or different significance of some which are of grave import when occurring in the adult, or from the peculiarity of some of the signs which it presents in young subjects. These observations, which could only be supplied by a man of large experience, give a special value to this branch of his subject. A chapter on Diseases of the Heart follows, next the Diseases of the Organs of Digestion and Assimilation, filling about two hundred pages, followed in the six concluding chapters by Intestinal Worms, with Diseases of the Urinary Organs, Abdominal Tumors, Infantile Cachexiæ, Syphilis, Scrofula and Rickets, Fevers, Smallpox and its congeners, Measles and Scarlatina. We have not undertaken to review a work of such established merit as the one before us, but merely to call the attention of our readers to the present edition, which is enlarged by the author's experience since the preceding one was published. We commend it to all as a most reliable adviser on many occasions when many treatises on the same subjects will utterly fail to help us. It is supplied with a very copious general index, and a special index to the formulæ scattered throughout the work.

Contributions to Bone and Nerve Surgery. By J. C. Nott, M.D., Professor of Surgery in Mobile Medical College. Philadelphia: J. B. Lippincott & Co. 1866. Pp. 96.

This matter-of-fact, though rather inelegant title, belongs to an essay devoted chiefly to the subject of necrosis. While it contains nothing new, it reviews carefully the subject of "bone pathology" in its relations to this disease, and advocates early operative interference, even though the sequestrum has not become loose; the author believing that exposure of the dead bone hastens separation, while exploration does no harm. For the next twenty years operations for necrosis must be among the most frequent which surgeons will be called upon to perform, and Dr. Nott's essay will undoubtedly do much good in familiarizing them with the principal features of this tedious and disabling affection. His experience among the Confederate wounded and his position as a medical teacher authorize him to speak *ex cathedra*. Unfortunately, all of us in time bid fair to become proficients in those chronic and lingering "gun-shot sequelæ" which Dr. Nott calls the "tertiary surgery" of wounds, as distinct from the "primary" and "secondary surgery" to which the earlier consequences belong.

The "nerve surgery" of this little brochure consists simply of two detailed cases of severe neuralgia—the one following a gun-shot injury, the other being caused by a neuromatous tumor.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, APRIL 26, 1866.

THE IMPORTATION OF CHOLERA.

In the epidemics of past years the march, as it was called, of cholera was slow, and its approach from city to city could be calculated in advance with considerable accuracy. The warning that preceded it was sufficiently timely to allow the places along its future route to make leisurely preparation for its coming, and although it sometimes, as contagious diseases do, swerved from its course, the rapidity of its progress was generally uniform. It was slow to cross to this side of the vast body of water between us and the infected ports, and many a ship may have left the European shore with its germs aboard which head winds and want of proper soil for development may have rendered harmless before arriving. The disease rarely failed, however, to effect a passage sooner or later, and once introduced spread along our routes of travel with the same uniformity of march it had exhibited in the old world. In the later epidemics cholera has shown a more rapid progress; its course can no longer be called a march, it is a flight. It journeys as fast as man by rail and steam ship, and is thus carried from its starting point to distant localities, leaving intermediate states untouched. To reach us even here, it is no longer necessary that the vessel which brings it should have sailed from an infected port, for it is entirely consistent with our present knowledge of its laws of incubation that it should emanate from the central States of Europe, reach Liverpool or Havre by steam in forty-eight hours, and embarking thence not manifest itself in the individual with whom it has been travelling until mid-ocean is reached. It is probably in this way that it has already succeeded in touching our shores three times before establishing itself in England.

Within a fortnight two steamers have arrived at ports north and south of us with the cholera on board; the first at Halifax with 1200 passengers, among whom 160 cases and 50 deaths had occurred, the second at New York, bearing about the same number of immigrants, with from 150 to 200 cases and 47 deaths. The former left Liverpool on the 28th ult., and the disease first showed itself when six days out. The latter sailed from Liverpool on the 4th inst., and on the eighth day of the voyage a passenger who had had diarrhœa since the vessel sailed, became worse and died. On the same day two others were attacked, and the disease rapidly extended. The passengers in both ships were mostly Germans who had reached England but a day or two before embarking, apparently well. No cholera existed in England or Ireland. At or about the end of the first week the disease breaks out, affects about the same number of persons, and is attended by the same mortality. How then did the disease originate? The answer seems clear to us, for we have recent intelligence from Europe that the cholera has appeared with great virulence on the Rhine, and it is from its borders that a large proportion of our German immigrants comes, or by its waters reaches England.

Another circumstance of peculiar interest is noticeable in the character of the epidemic on both ships; in neither case did it extend beyond the steerage or affect the cabin passengers. This to our minds affords strong corroborative evidence of the communicability of the disease and of the correctness of the Snow theory, although it would be improper to reason from data of which we have at present so little exact information. In other instances it has been noticed that a local outbreak has been preceded, as in this case, by a diarrhœa not supposed at first to be choleraic and affording abundant means of spreading the contagion. The similarity in the time of its appearance after sailing corroborates what has been elsewhere observed with regard to its term of incubation under similar conditions.

There is a warning, however, which even those who do not believe in the communicability of the disease will unite with us in taking from the circumstances, viz., the necessity of immediately putting our city in order. The cholera, although once checked on the threshold by stringent quarantine in the case of the Atlanta, has again succeeded in effecting a landing at two points on our coast, and fresh arrivals may take place on any day at ports where the invasion may not be so energetically met and timely crushed. Once fairly ashore, it cannot be restrained. It may be brought to Boston to-morrow. Are we prepared to meet it? Has anything of importance yet been done to improve the sanitary condition of our houses, streets and surroundings? If so, we are ignorant of it. We hear of a thorough medical inspection which is to begin on the first of May, but why, we ask, wait a week when a single day may bring the disease upon us? It should have been completed a month ago, for inspection is only the first step, and in this case the easiest. The proper execution of the work will require months, and the hot weather has already revived in many localities the forgotten odors of last summer. What can a medical inspection effect in the case of such a pestilential quagmire as the Church street district? The whole profession has proclaimed the danger threatened, and the city is still waiting for the legislature, which has already spent more than two months in failing to decide who is to blame and who is to pay, whereas the question is, what shall be done? What if that body comes to the conclusion that it is the duty of the city to protect its citizens in their municipal rights and to remove dangerous nuisances within their own territory? Does the city government propose to wait another year? Every day the evil is increasing, and every day brings us apparently no nearer its removal. The matter certainly demands action from some new quarter, and is grave enough for the people to assemble and discuss in public.

Professional Criticism.—We have but very few words to say in relation to the communication from Boston which appeared in the last number of the New York *Medical Record*, and those are for our readers at a distance who may have read it and are not fully acquainted with the character of all whom it concerns. The gentleman against whom the extraordinary accusation it contains is made needs no word of defence from us. The facts in the case alluded to will of course be restated as they occurred, and the true nature of the article will then appear in its proper light. With regard to the JOURNAL an allu-

sion is made near its close, which we shall only notice for the purpose of representing facts as they are. It is there stated that the discussion is transferred from the field in which it occurred for three good reasons, "viz., that the question, having become a public one, belongs to the profession at large; that such, the only jury by which we stand or fall, is best reached through a journal of more than local circulation; and that for reasons stated on page 234 of the 16th volume of the American Medical Association Transactions, I could pursue no other course."

The Boston Medical and Surgical Journal has reached its 74th volume; it is one of a very few which survived the war, and was the only weekly in the country which appeared uninterruptedly during that period. It had more than a local circulation then, it has a larger circulation now. We lost no subscribers by closing our pages to a controversy of an unpleasantly personal character, and we certainly should have refused an article in such very bad taste, to use the mildest expression we can think of, and betraying such entire ignorance of the laws of physiology as that published in the *Medical Record*. We would recommend to that journal, which has attained its 4th number, the observance of a similar precaution, if it desires an equally successful existence.

Messrs. Editors,—Thinking the suit recently tried in the Supreme Court, to which I was a party, in regard to the right of the physician to perform autopsies, of general interest to the profession, as it certainly was a novel one, I send you an abstract of the case from the Records of the City Hospital, and of the main points in the trial.

This was a suit *in tort*, with damages laid at $5000, brought by Ed. Murray and wife against L. A. Cutler, Superintendent, and D. W. Cheever, Surgeon, of the City Hospital. The history of the case is as follows:—

"Peter C. Murray, æt. 5 years, was brought to the City Hospital July 4th, 1864. Three hours since he was accidentally shot with a slug fired from a fowling piece. The ball entered about two inches below and behind the anterior superior spine of the left ilium. No hæmorrhage after being brought to the hospital. The wound had been explored by another physician.

"The patient having been etherized, the wound was thoroughly explored by Drs. Cheever and Buckingham. The surface of the ilium was found bared of periosteum for a short distance, sinuses extended among the muscles in several directions, but the course of the ball could not be traced.

"The patient never had any disturbance of the bowels or bladder, nor was there any sign of peritonitis. The symptoms were those of great constitutional irritation, followed, after three days, by cerebral disturbance. On the fifth day he died, with convulsions, followed by coma.

"*Autopsy*, 14 hours after death. Body not emaciated; no 'rigor mortis.' Gun-shot wound two inches behind and below anterior superior spine of *left* ilium. In *right* groin a large ecchymosed spot.

"*Brain* much congested; sinuses distended; excess of serum in

both lateral ventricles, fourth ventricle, and sub-arachnoid cavity of the spinal canal."

"The ball was found to have passed through the ilium, opposite its point of entrance. It had not passed through the iliac fascia, nor entered the cavity of the peritoneum; hence there was no peritonitis. Sinuses extended upwards along the *psoas* muscle, as high as the last dorsal vertebra; downwards into the hollow of the sacrum, under the sciatic notch, and also down the posterior aspect of the thigh. The sinuses were filled with dark-colored, purulent matter, very offensive. Intestines and bladder healthy. No ball was found, though searched for in every direction, and further attempts were desisted from, from fear of too great mutilation."

The cavity of the abdomen and the head were closed in the usual way, and swathed with bandages. When the mother first obtained access to the body (prematurely), a ridge was evident across the forehead, beneath the skin, where the thin edges of the sawed frontal bone had slipped by each other. This was all the mutilation she or her friends saw, or could swear to, during the trial.

The plaintiff alleged:—

1st. That the child was carried to the hospital against her will.

2d. That it was kept there against her will.

3d. That she was, at first, denied access to it.

4th. That she desired a coroner's inquest.

5th. That she did not consent to an autopsy.

6th. That she was unwilling the head should be opened.

7th. That the body was needlessly mutilated.

8th. That, being then pregnant, the sight of it had hastened delivery, and that the health of both mother and child had been injured in consequence.

The defendants contended:—

1st. That she brought the child to the hospital, in her own conveyance, *suâ sponte*.

2d. That she was advised and urged to leave it there for the child's sake, but not forced to do so.

3d. That she was denied access to it only during the etherization and exploration: but that subsequently she was allowed to remain with it until it died, and was fed and lodged at the expense of the hospital.

4th. That the parties who fired the shot having been released by the Chief of Police, as it was found to be accidental, the authorities did not consider an inquest necessary.

5th. That *she requested* the autopsy.

6th. That she said nothing about opening the head until she saw the body, after the autopsy.

7th. That there was no mutilation of the body. That the autopsy was performed according to rule. That the existence of cerebral symptoms, and the violence attending the injury, rendered the opening of the head justifiable, even if she had objected. That the search for the ball was given up, for fear of mutilation.

8th. That the defendants were not responsible for the consequences alleged.

Judge Chapman ruled as follows, in his charge to the jury:—

"His Honor instructed the jury that there was no record of any case similar to this in the common law. The laws of the Commonwealth as to interfering with dead bodies are severe, and it is treated as a crime so to interfere, punishable and perhaps actionable, at least it was so to be considered for this case. It is common to have an autopsy made for the purpose of ascertaining the cause of death, though formerly there were many superstitious notions in regard to it, especially among the ignorant. The plaintiffs contended that the body of the child was mutilated without their consent and without any reasonable cause, and this was the question to be submitted to the jury. The child was sent to the hospital by the mother, as she testifies, for the purpose of having the ball extracted, and the jury were to judge whether it was an act of kindness to take it away or not. She also says that she consented to have the ball extracted after the death of the child, but this was only because she desired that the murderer should be found, and it was a question for the jury to determine what the defendants might do in compliance with such consent; whether the request to extract the ball with the view to find the murderer was not enough to warrant them in finding out the cause of the death, and everything which the public interest might require."

The jury, after being out about five minutes, returned a *verdict for the defendants.*

This decision is believed to be of importance, as tending to prevent the black-mailing of hospitals and public officers by any who can find a pretext of discontent with the result of treatment of their friends either before or after death. The case had been abandoned for the plaintiffs by two lawyers, and had been kept in court two years. The medical profession are indebted to Judge Chapman for his broad and liberal views. D. W. C.

April 23d, 1866.

The Autopsy of Green.—Public attention has been so much drawn to the tiresome question of the culpability or responsibility of Green, the murderer, that it is a relief to read the results of the post-mortem examination of the head and brain as observed by Professor Jeffries Wyman.

Weight of brain	2 lbs. 8 oz.
Cerebrum . . .	2 " 3 "
Cerebellum . . .	5 "

"The average weight of the human brain according to Reid's tables is 3 lbs. 2 oz. Green's was ten ounces less. The average cerebellum is 6 oz. 3 drs.; Green's only 5 oz., but relatively to the cerebrum it is large. In the average the cerebrum to the cerebellum is as 8 to 1; in Green's case it is as 7 to 1. By the careful determination of the specific gravity of the brain it was found to be 1043—distilled water 1000. In this respect Green's was fully up to par. There was nothing else worthy of note to be found. The brain had a healthy look and firmness."

It will be seen by the above that the brain was small but healthy, nor was there any disease of the cranial organs. To follow to their logical conclusions the physiological arguments of many intelligent persons in this case, would relieve many a virtuous and wise man

amongst us of all personal responsibility, and doom him to the life-long confinement of an asylum. We hope if so much twaddle is to be expended in attempts to save another criminal, it may be in behalf of some poor fellow who was never allowed the possibility of moral development.

Nitro-Glycerine.—The terribly explosive properties of this dangerous substance have been illustrated by a painful coincidence of events in San Francisco and Aspinwall, by which many lives and much property have been destroyed. It is strange that similar accidents have not previously occurred in the mining districts of the Pacific coast. Nitro-glycerine, or glonoine, as it is sometimes called in medicine, is prepared by allowing glycerine to fall drop by drop into a mixture of equal parts of nitric acid and oil of vitriol, care being taken to prevent the temperature from rising too high. A heavy, oily looking liquid collects at the bottom of the vessel, which has a sweetish aromatic taste, and is a dangerous poison. A single drop placed upon the tongue produces a severe pain in the head for hours. Its formula is $C_6 H_6 (NO_4)_2 O_6$, or for two equivalents of hydrogen in the glycerine two of peroxide of nitrogen are substituted. A drop placed upon paper and struck on an anvil produces a powerful concussion. Under circumstances little understood the friction of its particles among themselves even when frozen, or contact with some foreign substance, is sufficient to produce such effects as those below given. Its manufacture or storage in some parts of Europe is forbidden, and the Mayor of New York has acted wisely in causing the removal of all found in that city.

"The following particulars of the disaster are from the *Panama Star and Hearld*:—

"Nearly, if not all the local freight of the European had been delivered, when about 7 o'clock in the morning of the 3d, a terrific explosion occurred on board, which tore away the upper parts of the ship and blew several large plates off the side. The wharf at which the ship was unloading, and which was some four hundred feet long, was literally torn to pieces; the superstructure was completely demolished to within a hundred feet of the freight house, and hardly a plank remained in the entire length of the structure that was not wrenched from its fastenings.

"Immediately in front of where the vessel lay, a gap was cut through the wharf, piles, planking, &c., all disappearing. The ship and wharf both caught fire, and the latter was saved from entire destruction only by the exertions of several citizens, who got the fire engine to work, and after a few hours extinguished the flames, regardless of the risk they incurred from another explosion of the burning ship. The Panama Railroad Company's splendid freight house is left a pile of ruins. The force of air caused by the concussion seems to have raised the roof—which was construeted of iron and slate—upwards a few feet, its own weight bringing it down with immense force into the building, and carrying with it both the end walls, leaving the house, excepting the side walls, which appear but little if at all injured, a mass of ruins. * * * * * *

"The most awful part of the catastrophe was the dreadful loss of life and suffering attending it. Of the number killed and missing it is impossible to give a correct estimate; but from present data the

number may safely be put down at fifty, and is, we fear, more likely to prove over this number than under it. Of the forty-one men comprising the crew of the European, nine have been killed and twelve are missing.

"The scene in Aspinwall after the first explosion cannot be described—it was harrowing in the extreme. Whilst the ruins gave an air of desolation to the place, the mangled and lacerated bodies or pieces of bodies to be met with in every direction for a great distance around the ruin of the disaster were heartrending, and the suffering of the poor mortals crushed and bruised, in whom life was not extinct, was really dreadful.

"The amount of damage caused by the explosion is roughly estimated at $1,000,000, which is about the lowest figure at which it can be placed."

Middlesex South District Medical Society.—At the annual meeting of this Society, held at Waltham, April 18th, 1866, the following officers were elected:—*President*, Anson Hooker, M.D. *Vice President*, Sam'l Richardson, M.D. *Secretary*, J. T. G. Nichols, M.D. *Treasurer*, B. F. D. Adams, M.D. *Supervisors*, Drs. L. E. Partridge, J. Pratt, H. Holmes. *Censors*, H. Cowles, H. H. Pillsbury, Morrill Wyman. *Commissioner on Trials*, W. W. Wellington, M.D. *Councillors*, Drs. E. F. Barnes, J. C. Dorr, J. C. Harris, Enos Hoyt, Theo. Kittredge, A. C. Livermore, L. B. Morse, J. T. G. Nichols, J. Pratt, Ira Russell, J. F. Wakefield.

J. T. G. Nichols, *Secretary.*

The International Ophthalmological Congress will be held in Vienna on the 25th of August, and the Committee, Prof. Jäger, Prof. Arlt and Dr. Gulz, desires to extend an invitation to oculists of all countries.

VITAL STATISTICS OF BOSTON.

For the Week ending Saturday, April 21st, 1866.

DEATHS.

	Males.	*Females.*	*Total*
Deaths during the week	36	41	77
Ave. mortality of corresponding weeks for ten years, 1856—1866	41.5	37.9	79.4
Average corrected to increased population	00	00	86.47
Death of persons above 90		0	0

Books Received.—Asiatic Cholera. By F. A. Burrall, M.D. New York: Wm. Wood & Co.

Married,—In this city, 9th inst., Dr. H. W. Mitchell, of New York, to Miss Sarah M. Dexter, of Boston.

Died,—In Providence, R. I., suddenly, Dr. John A. Wadsworth, aged 72, one of the oldest physicians of the city. His name has been identified of late years with an improved instrument for the relief of prolapsus uteri.—In New York City, Joseph M. Smith, M.D., 77.

Deaths in Boston for the week ending Saturday noon, April 21st, 77. Males, 36—Females, 41. Accident, 1—anæmia, 1—apoplexy, 1—disease of the bowels, 1—inflammation of the bowels, 2—disease of the brain, 5—bronchitis, 1—cancer, 3—consumption, 15—convulsions, 1—croup, 2—cystitis, 1—diarrhœa, 1—diphtheria, 5—dropsy of the brain, 5—ship fever, 1—typhoid fever, 2—hæmorrhage, 1—disease of the heart, 2—infantile disease, 1—congestion of the lungs, 2—inflammation of the lungs, 5—marasmus, 1—malformation, 1—old age, 1—paralysis, 1—peritonitis, 1—premature birth, 3—puerperal disease, 2—rheumatism, 1—scalded, 1—scrofula, 2—unknown, 4.

Under 5 years of age, 26—between 5 and 20 years, 16—between 20 and 40 years, 16—between 40 and 60 years, 10—above 60 years, 9. Born in the United States, 62—Ireland, 10—other places, 5.